

Work Order ID 150343

Wednesday, August 24, 2016 11:44:02 AM

150343

Page 1

Item ID: 646.4001

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: AS350 Cable Cutter System

Start Date: 8/17/2016 Start Qty: 1.00

1

Cust Item ID:

Required Date: 8/24/2016 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

DAS
21
9-89

Date:

AUG 26 2016

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start ***NR1***Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
646.4000	C1								
100	Document Control	0.00							
100	DOCUMENT CONTROL								
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile & type labels per PPP 646.4001								
110	Pick Kit	0.00							
110									
Packaging	Memo	0.00							
Packaging									
120	QC4- 100% Inspect kits for completeness	0.00							
120									
QC	Memo	0.00							
Quality Control									

SEP 01 2016

① R

AUG 29 2016

SEP 01 2016

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

Work Order ID 150343

Wednesday, August 24, 2016 11:44:03 AM

150343

Page 2

Item ID: 646.4001 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: AS350 Cable Cutter System
Start Date: 8/17/2016 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 8/24/2016 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Packaging	0.00							
130									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP 646.4001 Location: _____ <i>Sold</i>								
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.02							
Quality Control									

SEP 01 2016

DAS
21
9-89

SEP 01 2016

DAS
21
9-89

SEP 01 2016

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
		OTHER : _____			

Picklist Print

Wednesday, August 24, 2016 11:44:00 AM

Page 1

Work Order ID: 150343

150343

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 8/17/2016

Required Date: 8/24/2016

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A 12.10.23 NEW ISSUE DD VERF:JLM
IPP REV:B 15.01.08 AS PER DWG REV.B DD VERF:JLM IPP
REV:C 16.01.07 AS PER DWG REV.C DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	----------------	--------------	---------------	----------------	--------

600.0129		Purchased	No			100	f	88.0000	8	8			
600 0129									**				
VHB TAPE 75935A651													

DAS
27
9-89

Location

Loc Qty

Loc Code

CCK095

88

m127920

88

600.0990		Purchased	No			100	Each	23.0000	1	1			
600 0990									**				
Magnabond 6398 Part A Size 112 ml													

exp 2/1/17

DAS
27
9-89

Location

Loc Qty

Loc Code

CA2

11

M135213

11

PKG

12

M134167

1

M134249

11

600.0991		Purchased	No			100	Each	22.0000	1	1			
600 0991									**				
Magnabond 6398 Part B Size 112 ml													

exp 2/1/17

DAS
27
9-89

Location

Loc Qty

Loc Code

CA2

11

m135213

11

PKG

11

m134167

1

m134249

10

AUG 29 2016

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
		OTHER : _____			

Picklist Print

Wednesday, August 24, 2016 11:44:01 AM

Page 2

Work Order ID: 150343

150343

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 8/17/2016

Required Date: 8/24/2016

Start Qty: 1.00

Required Qty: 1.00

600.1012 Purchased No

100 Each

12.0000

1

1

600 1012

Sealant PR1425B2 (#654 sem)

**

PC

DAS
6
9-89

03/01/2017

Location

Loc Qty

Loc Code

cck017

12

m135135

4

m135407

8

1

600.1013 Purchased No

100 Each

735.0000

5

5

600 1013

021200-3M TAPE PRIMER 94 PRIMER 24216

**

PC

DAS
6
9-89

Location

Loc Qty

Loc Code

CCK095

735

m131145

735

6/15/2016

1

1

5

646.2910 Manufactured No

100 Each

4.0000

1

1

646 2910

Deflector

**

PC

DAS
6
9-89

Location

Loc Qty

Loc Code

CCK050

4

140993

4

1

646.3001 Manufactured No

100 Each

1.0000

1

1

646 3001

Lower Cutter Assembly

**

148335

SP

DAS
6
9-89

Location

Loc Qty

Loc Code

cck018

1

142639

1

AUG 29 2016

DAS
27
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

Wednesday, August 24, 2016 11:44:01 AM

Page 3

Work Order ID: 150343

150343

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 8/17/2016

Required Date: 8/24/2016

Start Qty: 1.00

Required Qty: 1.00

646.3110

Manufactured No

100

Each

16.0000

1

1

646 3110

Channel

**

PC

DAS
6
9-89

Location

Loc Qty

Loc Code

cck020

16

141015

16

646.3210

Manufactured No

100

Each

11.0000

1

1

646 3210

Support

**

PC

DAS
6
9-89

Location

Loc Qty

Loc Code

cck020

11

141064

1

142469

10

646.3301

Manufactured No

100

Each

5.0000

1

1

646 3301

Upper Cutter Assy

**

PC

DAS
6
9-89

Location

Loc Qty

Loc Code

cck018

5

148268

5

646.3510

Manufactured No

100

Each

18.0000

1

1

646 3510

Strut

**

PC

DAS
6
9-89

Location

Loc Qty

Loc Code

cck104

7

140979

7

CCK108A

11

140979

11

AUG 29 2016

Wednesday, August 24, 2016 11:44:01 AM

Shop Packet Print

Page 3

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

Picklist Print

Wednesday, August 24, 2016 11:44:01 AM

Page 4

Work Order ID: 150343

150343

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 8/17/2016

Required Date: 8/24/2016

Start Qty: 1.00

Required Qty: 1.00

646.3511 Manufactured No
646 3511
Strut

100 Each 17.0000 1 1

**

PC

DAS 6 9-89

Location Loc Qty Loc Code

cck104	8	
141499	8	
CCK108A	9	
141499	9	

646.3610 Manufactured No
646 3610
Filler

100 Each 7.0000 1 1

**

PC

DAS 6 9-89

Location Loc Qty Loc Code

cck104	7	
141103	7	

646.3710 Manufactured No
646 3710
Doubler

100 Each 17.0000 1 1

**

PC

DAS 6 9-89

Location Loc Qty Loc Code

CCK002	17	
140753	17	

646.3711 Manufactured No
646 3711
Clip

100 Each 10.0000 1 1

**

PC

DAS 6 9-89

Location Loc Qty Loc Code

cck105	10	
142632	10	

AUG 29 2016

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

Wednesday, August 24, 2016 11:44:01 AM

Page 5

Work Order ID: 150343

150343

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 8/17/2016

Required Date: 8/24/2016

Start Qty: 1.00

Required Qty: 1.00

646.3712
646 3712
Clip

Manufactured No

100 Each

12.0000

1 1

**

PC

DAS
6
9-89

Location

Loc Qty

Loc Code

cck105

12

140787

12

1

1

**

PC

DAS
6
9-89

646.3713
646 3713
Gusset

Manufactured No

100 Each

16.0000

1 1

**

Location

Loc Qty

Loc Code

cck105

16

140084

16

1

1

**

PC

DAS
6
9-89

646.3714
646 3714
Gusset

Manufactured No

100 Each

3.0000

1 1

**

Location

Loc Qty

Loc Code

cck105

3

140048

3

1

1

**

PC

DAS
6
9-89

646.3715
646 3715
Strut Doubler

Manufactured No

100 Each

11.0000

2 2

**

Location

Loc Qty

Loc Code

cck105

11

142630

11

1

1

**

PC

DAS
6
9-89

646.3716
646 3716
Gauge Bracket

Manufactured No

100 Each

28.0000

1 1

**

Location

Loc Qty

Loc Code

cck105

28

140845

28

1

1

AUG 29

DAS
6
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

Wednesday, August 24, 2016 11:44:01 AM

Page 6

Work Order ID: 150343

150343

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 8/17/2016

Required Date: 8/24/2016

Start Qty: 1.00

Required Qty: 1.00

646.3717
646 3717
Doubler

Manufactured No

100 Each

15.0000

1 1

**

PC

DAS
6
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

cck105

15

142634

15

646.3718
646 3718
Custom Washer

Manufactured No

100 Each

3.0000

2

**

② B148 306 R

DAS
6
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

cck105

3

140788

3

646.3719
646 3719
Doubler

Manufactured No

100 Each

5.0000

2 2

**

PC

DAS
6
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

cck105

5

138311

5

646.3810
646 3810
Bracket

Manufactured No

100 Each

9.0000

2 2

**

PC

DAS
6
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

cck105

9

141555

9

646.3811
646 3811
Radius Block

Manufactured No

100 Each

4.0000

1 1

**

PC

DAS
6
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

CCK106

4

140895

4

AUG 29 2016

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

Wednesday, August 24, 2016 11:44:01 AM

Page 7

Work Order ID: 150343

150343

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 8/17/2016

Required Date: 8/24/2016

Start Qty: 1.00

Required Qty: 1.00

646.3812 Manufactured No

100 Each

5.0000

2

2

646 3812

Gusset Bracket

DAS
27
9-89

**

PC

DAS
6
9-89

Location

Loc Qty

Loc Code

CCK106

5

140978

5

2

646.3813 Manufactured No

100 Each

9.0000

1

1

646 3813

Strut Bracket

**

PC

DAS
6
9-89

Location

Loc Qty

Loc Code

CCK106

9

141019

4

148269

5

1

646.3910 Manufactured No

100 Each

19.0000

4

4

646 3910

Shim

DAS
27
9-89

**

PC

DAS
6
9-89

Location

Loc Qty

Loc Code

CCK106

19

140772

19

4

646.3911 Manufactured No

100 Each

36.0000

1

1

646 3911

Shim

DAS
27
9-89

**

PC

DAS
6
9-89

Location

Loc Qty

Loc Code

cck104

16

126229

16

CCK106

20

126059

20

1

DAS
27
9-89

AUG 29 2016

Wednesday, August 24, 2016 11:44:01 AM

Shop Packet Print

Page 7

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Wednesday, August 24, 2016 11:44:01 AM

Required Qty: 1.00

2

4

2

2

2

AUG 29 2015

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Picklist Print

Wednesday, August 24, 2016 11:44:01 AM

Page 9

Work Order ID: 150343

150343

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 8/17/2016

Required Date: 8/24/2016

Start Qty: 1.00

Required Qty: 1.00

647.7703 Manufactured No

100 Each

16.0000

2

2

647 7703

Strut Assembly

**

PC

DAS 6 9-89

Location

Loc Qty

Loc Code

CCK114

16

144435

4

145013

12

650.9201 Manufactured No

100 Each

8.0000

2

2

650 9201

Eyelet Bracket Assembly

**

PC

DAS 6 9-89

Location

Loc Qty

Loc Code

cck127

8

141582

8

AN3-11A Purchased No

100 Each

179.0000

10

10

AN3-11A

Bolt

**

PC

DAS 6 9-89

Location

Loc Qty

Loc Code

over003

100

m135390

100

ST349

79

m134852

79

AN3-12A Purchased No

100 Each

32.0000

2

2

AN3-12A

Bolt

**

PC

DAS 6 9-89

Location

Loc Qty

Loc Code

ST349

32

m133064

16

m134257

16

AUG 29 2016

Wednesday, August 24, 2016 11:44:01 AM

Shop Packet Print

Page 9

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval																																																									
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Picklist Print

Wednesday, August 24, 2016 11:44:01 AM

Page 10

Work Order ID: 150343

150343

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 8/17/2016

Required Date: 8/24/2016

Start Qty: 1.00

Required Qty: 1.00

AN3-13A
Purchased No
AN3-13A
Bolt

100 Each 53.0000 1 1
**

pc

DAS 6 9-89

Location	Loc Qty	Loc Code
GA	20	
m127070	20	
ST349	33	
m134365	33	

AN316C4R
Purchased No
AN316C4R
Nut, Jam

100 Each 23.0000 2 2
**

pc

DAS 6 9-89

Location	Loc Qty	Loc Code
ST331	23	
m133234	21	
m133523	2	

AN3-3A
Purchased No
AN3-3A
Bolt

100 Each 196.0000 4 4
**

pc

DAS 6 9-89

Location	Loc Qty	Loc Code
ST350	196	
m134738	24	
m135274	22	
m135408	50	
m135466	100	

AN3-4A
Purchased No
AN3-4A
Bolt

100 Each 197.0000 10 10
**

pc

DAS 6 9-89

Location	Loc Qty	Loc Code
ST350	197	
m134955	197	

AUG 29 2016

Wednesday, August 24, 2016 11:44:01 AM

Shop Packet Print

Page 10

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐				
Date :	Step #:	QTY Effective :			MRB (QSI042) Approval	
Description Work Order Deviation		Disposition				
					Completed By	
					Lead hand / Supervisor Approval Verification	
					QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐				
OTHER : _____						

Picklist Print

Wednesday, August 24, 2016 11:44:01 AM

Work Order ID: 150343

150343

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 8/17/2016

Required Date: 8/24/2016

Start Qty: 1.00

Required Qty: 1.00

AN3-5A Purchased No

100 Each

353.0000

2 2

AN3-5A

Bolt

**

PC

DAS
6
9-89

Location

Loc Qty

Loc Code

FP001

157

m133686

2

m134502

155

ST350

196

m135058

196

AN3-6A Purchased No

100 Each

207.0000

2 2

AN3-6A

Bolt

**

PC

DAS
6
9-89

Location

Loc Qty

Loc Code

ST349

207

M134955

207

AN44-5A Purchased No

100 Each

23.0000

2 2

AN44-5A

Eyebolt

**

PC

DAS
6
9-89

Location

Loc Qty

Loc Code

ST339

23

m133990

2

m134134

1

m135127

20

AN4C7A Purchased No

100 Each

94.0000

2 2

AN4C7A

BOLT

**

PC

DAS
6
9-89

Location

Loc Qty

Loc Code

OVER002

50

m135470

50

ST345

44

m134861

44

AUG 29 2016

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

Wednesday, August 24, 2016 11:44:01 AM

Page 12

Work Order ID: 150343

150343

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 8/17/2016

Required Date: 8/24/2016

Start Qty: 1.00

Required Qty: 1.00

AN665-34R Purchased No
AN665-34R
 Clevis

100 Each 7.0000 2
 **

② 134202 pc DAS 6 9-89

CCR264SS3-02 Purchased No
CCR264SS3-02
 Cherry Rivet

Location Loc Qty Loc Code
 ST330 7
 M135087 7
 100 Each 227.0000 36 36
 **

pc DAS 6 9-89

CR3213-5-3 Purchased No
CR3213-5-3
 Cherry Rivet

Location Loc Qty Loc Code
 ST321 227
 M134134 2
 M135127 225
 100 Each 134.0000 14 14
 **

14 134754 pc DAS 6 9-89

MS20426AD5-7 Purchased No
MS20426AD5-7
 RIVET

Location Loc Qty Loc Code
 CCK003 100
 m135408 100
 ST319 34
 m134142 34
 100 Each 911.0000 2 2
 **

pc DAS 6 9-89

Location Loc Qty Loc Code
 ST311 911
 M133922 911

2 AUG 29 2016

Wednesday, August 24, 2016 11:44:02 AM

Shop Packet Print

Page 12

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																											
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval																																																							
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																							
Root Cause		FAULT CATEGORY																																																													
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER :	
Misidentified ☐	Past Due ☐																																																														

Picklist Print

Page 13

Wednesday, August 24, 2016 11:44:02 AM

Work Order ID: 150343

150343

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 8/17/2016

Required Date: 8/24/2016

Start Qty: 1.00

Required Qty: 1.00

MS20470AD5-5 Purchased

No

100

Each

894.0000

8

8

MS20470AD5-5 5

Rivet

**

PC 6 9-89

Location

Loc Qty

Loc Code

ST309

894

m134063

894

MS20470AD5-6 Purchased

No

100

Each

784.0000

8

8

MS20470AD5-6

RIVET

**

PC 6 9-89

Location

Loc Qty

Loc Code

ST309

784

124089

784

MS20470AD5-7 Purchased

No

100

Each

440.0000

3

3

MS20470AD5-7

Rivet

**

PC 6 9-89

Location

Loc Qty

Loc Code

ST309

440

123425

440

MS21042-08 MS21042L08 Purchased

No

100

Each

33.0000

2

MS21042-08

USE MS21042L08

**

2 MBS 133 pc 6 9-89

Location

Loc Qty

Loc Code

ST304

25

122815

25

ST306

8

m130388

8

MS21042-3 MS21042L3 Purchased

No

100

Each

0.0000

2

MS21042-3

Nut

**

2 MBS 135 pc 6 9-89 AUG 29 2016

Wednesday, August 24, 2016 11:44:02 AM

Shop Packet Print

Page 13

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

Wednesday, August 24, 2016 11:44:02 AM

Page 14

Work Order ID: 150343

150343

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 8/17/2016

Required Date: 8/24/2016

Start Qty: 1.00

Required Qty: 1.00

MS21042L3

Purchased

No

100

Each

1,576.000

61

61

MS21042L3

Nut

PC

DAS
6
9-89

Location

Loc Qty

Loc Code

FP001

14

m133790

14

GA

531

m134360

112

m135135

419

ST303

1031

m134039

12

m135056

7

m135135

412

m135407

600

61

DAS
6
9-89

MS21042L4

Purchased

No

100

Each

2,179.000

2

2

MS21042L4

Nut

PC

Location

Loc Qty

Loc Code

FP001

51

m133363

51

GA

424

m133769

116

m135058

308

ST3003

25

m134955

25

ST303

1679

m133769

12

m134055

24

m135297

643

m135470

1000

2

AUG 29 2016

Wednesday, August 24, 2016 11:44:02 AM

Shop Packet Print

Page 14

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

Picklist Print

Wednesday, August 24, 2016 11:44:02 AM

Page 15

Work Order ID: 150343

150343

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 8/17/2016

Required Date: 8/24/2016

Start Qty: 1.00

Required Qty: 1.00

MS21047-3 Purchased No

MS21047-3

Nut Plate

100 Each 153.0000 18 18

**

PC

DAS
6
9-89

Location

Loc Qty

Loc Code

ST301

153

m134955

53

m135297

100

18

MS24693-C278

Purchased No

MS24693-C278

Screw

100 Each 80.0000 5 5

**

PC

DAS
6
9-89

Location

Loc Qty

Loc Code

ST278

80

m135135

80

5

MS24694-S51

Purchased No

MS24694-S51

Screw

100 Each 264.0000 5 5

**

PC

DAS
6
9-89

Location

Loc Qty

Loc Code

ST284

264

m135442

264

5

MS24694-S54

Purchased No

MS24694-S54

SCREW

100 Each 90.0000 2 2

**

PC

DAS
6
9-89

Location

Loc Qty

Loc Code

over006

50

m134851

50

ST284

40

m135274

40

2

AUG 29 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

Page 16

Wednesday, August 24, 2016 11:44:02 AM

Work Order ID: 150343

150343

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 8/17/2016

Required Date: 8/24/2016

Start Qty: 1.00

Required Qty: 1.00

MS24694-S55

Purchased

No

100

Each

204.0000

3

3

MS24694-S55

Screw

**

PC

DAS
27
9-89

Location

Loc Qty

Loc Code

ST283

204

m134376

104

m135408

100

3

MS27039-08-13

Purchased

No

100

Each

142.0000

2

2

MS27039-08-13

Screw

**

PC

DAS
27
9-89

Location

Loc Qty

Loc Code

ST278

142

124326

142

2

MS27039-1-10

Purchased

No

100

Each

18.0000

2

2

MS27039-1-10

SCREW

**

PC

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

14

m129541

14

ST280

4

m134676

4

2

MS27039-1-12

Purchased

No

100

Each

53.0000

6

6

MS27039-1-12

Screw

**

PC

DAS
27
9-89

Location

Loc Qty

Loc Code

ST280

53

m133988

3

m134294

50

3 4
3 4

AUG 29 2016

Wednesday, August 24, 2016 11:44:02 AM

Shop Packet Print

Page 16

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

Wednesday, August 24, 2016 11:44:02 AM

Page 17

Work Order ID: 150343

150343

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 8/17/2016

Required Date: 8/24/2016

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-16

Purchased

No

100

Each

160.0000

24

24

MS27039-1-16

Screw

**

PC

DAS
6
9-89

Location

Loc Qty

Loc Code

ST280

160

m134502

160

22

22

24

MS27039-1-19

Purchased

No

100

Each

153.0000

22

22

MS27039-1-19

Screw

**

PC

DAS
6
9-89

Location

Loc Qty

Loc Code

GA

82

m134134

82

ST280

71

m135058

71

2

2

22

MS27039-1-20

Purchased

No

100

Each

105.0000

2

2

MS27039-1-20

Screw

**

PC

DAS
6
9-89

Location

Loc Qty

Loc Code

ST280

105

124326

105

4

4

2

MS27039-1-21

Purchased

No

100

Each

265.0000

4

4

MS27039-1-21

Screw

**

PC

DAS
6
9-89

Location

Loc Qty

Loc Code

ST280

265

m127904

265

4

AUG 29 2016

Wednesday, August 24, 2016 11:44:02 AM

Shop Packet Print

Page 17

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

Wednesday, August 24, 2016 11:44:02 AM

Page 18

Work Order ID: 150343

150343

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 8/17/2016

Required Date: 8/24/2016

Start Qty: 1.00

Required Qty: 1.00

NAS1149F0332P

Purchased

No

100

Each

1,441.000

144

144

NAS1149F0332P

Washer

PC

DAS
6
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

282

m133709

282

ST262

1159

m134257

37

m134676

19

m135058

1103

144

NAS1149F0363P

Purchased

No

100

Each

246.0000

2

2

NAS1149F0363P

WASHER

PC

DAS
3
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST262

246

124555

246

2

NAS1149F0432P

Purchased

No

100

Each

865.0000

4

4

NAS1149F0432P

WASHER

PC

DAS
6
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST262

865

M134955

865

4

AUG 29 2016

Wednesday, August 24, 2016 11:44:02 AM

Shop Packet Print

Page 18

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐					
		OTHER : _____							

Picklist Print

Page 19

Wednesday, August 24, 2016 11:44:02 AM

Work Order ID: 150343

150343

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 8/17/2016

Required Date: 8/24/2016

Start Qty: 1.00

Required Qty: 1.00

NAS1149FN832P

Purchased

No

100

Each

1,884.000

4

4

NAS1149FN832P

Washer

PC

6
9.83

Sm7

Location

Loc Qty

Loc Code

GA

1705

M133316

16

M133769

89

M135058

1600

ST263

179

M134257

179

4

AUG 29 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					



APICAL INDUSTRIES, INC.
dba DART AEROSPACE

ENGINEERING CHANGE NOTICE NO.		05304		SHEET 1 OF 1					
DWG NO.	646.4000	REV:	C	PREPARED BY	J. BECKER	DATE:	02/04/16	EFFECT ON DWG ☐ INC. ☒ UNINC.	
DWG TITLE: AS350 CABLE CUTTERS KIT									
APPROVED BY:		ENGR	MFG		QC	EFF. NEXT ORDER			
REASON: REVISED F/N 12.								ECR: N/A	

TRANSACTION CODES (TC):
A-ADD C-CREATE
R-REVISE D-DELETE

ACTION ITEM:
1. N/A

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 150343 MLJ
160826

SHEET 1, BOM IS:

12	R	601.1624	8	16	LOCKNUT	MS21042L3	
F/N	TC	PART NUMBER	4006	4005	DESCRIPTION	MATERIAL	SPECIFICATION
			QTY				
DOCUMENTS EFFECTED:					CHANGE CATEGORY	DER REVIEW REQUIRED	
☐ PATTERN ☐ MDL ☐ INSTALL INSTRUCTIONS ☐ ICA ☐ FMS ☒ BOM					☐ MAJOR ☒ MINOR	☐ YES ☒ NO	

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES DBA DART AEROSPACE. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE EXPRESS WRITTEN PERMISSION OF APICAL INDUSTRIES DBA DART AEROSPACE IS PROHIBITED.

NOTES:

1 AFTER INSTALLATION, APPLY F/N 54 A/R TO FILL GAPS AND FILLET EDGES.

2 INSTALL F/N 14 WITH F/N 52 & 53.

3 3M VHS ADHESIVE TAPE .025" THICK X .50" WIDE
VENDOR: MCMASTER-CARR P/N 75935A651.

4 3M TAPE PRIMER 94, APPLY TO BOTH SURFACES A/R BEFORE TAPE.
VENDOR: R.S. HUGHES P/N D21200-24216.

5 REUSE FASTENERS FROM F/N 1.

6 USE WASHERS A/R AS SHIMS TO OBTAIN BEST FITMENT.

7 AT CUSTOMERS OPTION, INSTALL F/N 65 BY MATCH DRILLING ON TO F/N 1.

8 INSTALL SHIM IF OEM PROVISIONS ARE INSTALLED ON AIRCRAFT. REMOVE SHIM LAYERS TO ACHIEVE CORRECT SIZE. MATCH DRILL HOLES. USE F/N 78 SCREW IN PLACE OF F/N 17 SCREW.

9 NEWER INSTALLATIONS ON AIRCRAFT WITH UPDATED CANOPY MAY REQUIRE DIFFERENT LENGTH SCREWS. USE F/N 62 TO REPLACE F/N 44 & F/N 26 IN PLACE OF F/N 41 WHEN NECESSARY.

UNINCORPORATED ECN(S)

05304

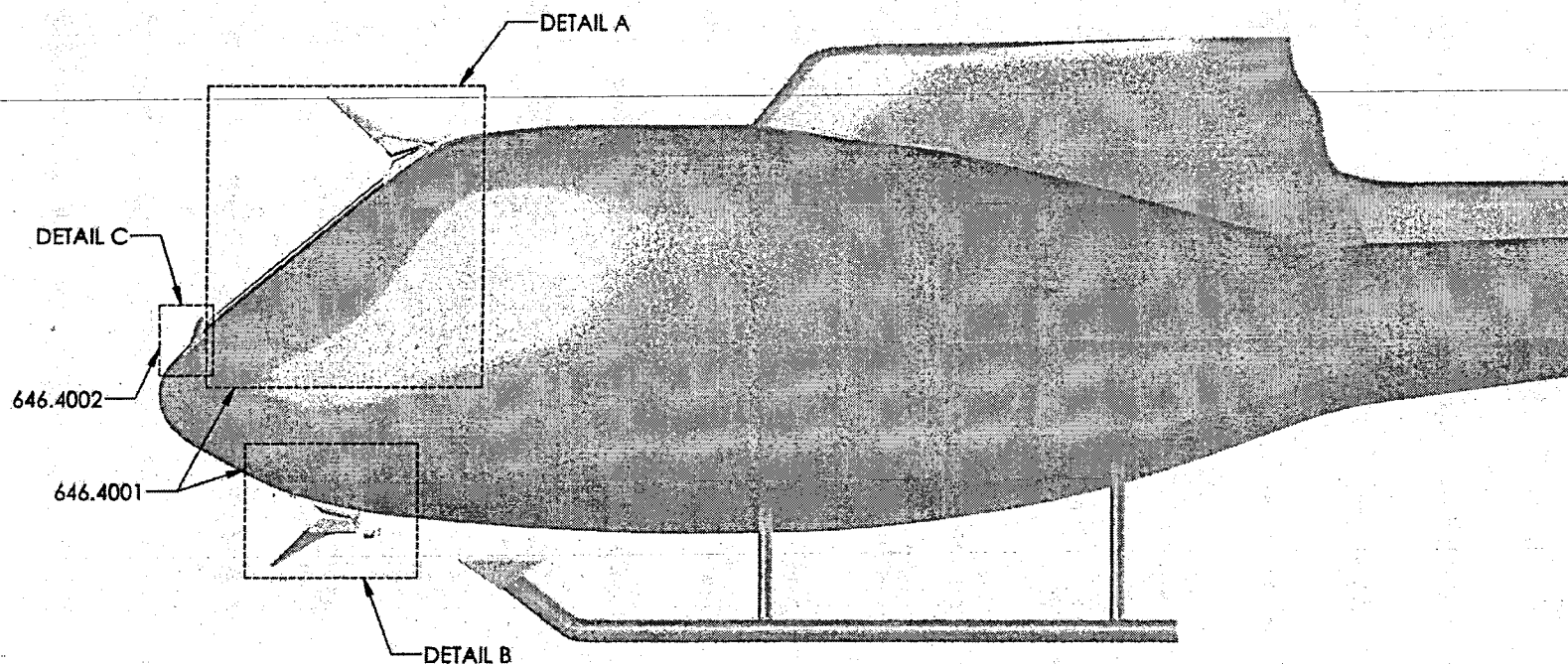
5	5	5	78	601.3875	SCREW	MS27039-1-10	
1	1	1	77	646.9410	SHIM	AN3-14	
	4	4	74	601.2764	WASHER	MS27039-1-10	
	2	2	75	601.2973	LOCKNUT	MS27039-1-10	
	2	2	74	601.2988	SCREW	MS27039-1-10	
	2	2	73	601.2943	LOCKNUT	MS27039-1-10	
	2	2	72	601.3128	NUT	AN3-14	
	2	2	71	601.3209	LOCKNUT	MS27039-1-10	
	4	4	70	601.2436	WASHER	MS27039-1-10	
	2	2	69	601.2669	BOLT	AN3-14	
	2	2	68	601.3119	CLEVIS	AN3-14	
	2	2	67	601.3121	EYE BOLT	AN3-14	
	2	2	66	650.9201	EYE BRACKET ASSY	AN3-14	
REF	REF	REF	65	647.5701	GPS MOUNT KIT	AN3-14	
		2	64	601.3151	WASHER	MS27039-1-10	
		2	63	601.2911	SCREW	MS27039-1-10	
	24	24	62	601.2637	SCREW	MS27039-1-10	
2	2	2	61	601.2763	BOLT	AN3-14	
	1	1	60	646.3913	SHIM		
	4	4	59	646.3912	SHIM		
	1	1	58	646.3911	SHIM		
	4	4	57	646.3910	SHIM		
	5	5	56	600.1013	PRIMER		
	8 FT	8 FT	55	600.0129	VHS TAPE		
	1	1	54	600.1012	SEALANT	MS27039-1-10	
	1	1	53	600.0991	MAGNEBOND 6376 PART B		
	1	1	52	600.0990	MAGNEBOND 6376 PART A		
6	10	10	51	601.2826	BOLT	AN3-14	
		2	50	646.3814	WIPER BRACKET		
		2	49	601.2910	SCREW	MS27039-1-10	
	2	2	48	601.1365	SCREW	MS27039-1-10	
	2	2	47	646.3719	DOUBLER		
	2	2	46	646.3718	CUSTOM WASHER		
	1	1	45	646.3717	DOUBLER		
	22	22	44	601.1948	SCREW	MS27039-1-10	
	2	2	43	601.1952	SCREW	MS27039-1-10	
	4	4	42	601.1956	SCREW	MS27039-1-10	
4006	4003	4004	4001	4002	FIND #	PART #	SPEC.

REV.	DESCRIPTION	DATE	APPROVED
A	INCORPORATED ECN 02199, 02201, 02210 & 02245	02/08/2010	P. BRAVO
B	INCORPORATED ECN 02046, 02047 & 04751	11/04/2014	P. BRAVO
C	INCORPORATED ECN 02096	08/09/2018	P. BRAVO

		2	2	41	601.2829	SCREW	MS24694554
		2	2	40	601.2831	RIVET	MS20426AD5-7
		1	1	39	646.3716	GAUGE BRACKET	
		6	6	38	601.1953	SCREW	MS27039-1-12
	2	2	37	646.3715	STRUT DOUBLER		
2	2	2	36	601.2824	BOLT	AN3-5A	
12	36	36	35	601.2277	RIVET	CC6204854-02	
6	18	18	34	600.0795	NUTPLATE	MS21047-3	
3	3	3	33	601.2545	RIVET	MS20470AD5-7	
1	1	1	32	646.3813	STRUT BRACKET		
4	4	4	31	601.2822	BOLT	AN3-3A	
2	2	2	30	646.3812	GUSSET BRACKET		
8	8	8	29	601.2544	RIVET	MS20470AD5-6	
1	1	1	28	646.3714	GUSSET		
1	1	1	27	646.3610	FILLER		
3	3	3	26	601.2830	SCREW	MS24694555	
2	2	2	25	601.2825	BOLT	AN3-6A	
1	1	1	24	646.3811	RADIUS BLOCK		
1	1	1	23	646.3712	CLIP		
1	1	1	22	646.3711	CLIP		
8	8	8	21	601.2832	RIVET	MS20470AD5-8A	
14	14	14	20	601.2020	RIVET	CR3215-6-3	
4	6	6	19	601.2823	BOLT	AN3-4A	
1	1	1	18	601.2827	BOLT	AN3-13A	
5	5	5	17	601.2912	SCREW	MS24694551	
1	1	1	16	646.3713	GUSSET		
1	1	1	15	646.3210	SUPPORT		
1	1	1	14	646.3710	DOUBLER		
1	1	1	13	646.3110	CHANNEL		
14	10	8	61	601.1624	LOCKNUT	MS21048-3	
16	32	18	16	601.1607	WASHER	MS21048-2	
			10	646.3410	LN WIPER DEFLECTOR		
			9	646.3411	RN WIPER DEFLECTOR		
		2	8	647.7703	STRUT ASSY		
		2	7	647.0112	STRUT BRACKET		
1	1	1	6	646.3511	STRUT		
1	1	1	5	646.3510	STRUT		
2	2	2	4	646.3810	BRACKET		
		1	3	646.2910	DEFLECTOR		
1	1	1	2	646.3001	LOWER CUTTER ASSY		
		1	1	646.3301	UPPER CUTTER ASSY		
X				646.4006	LOWER CUTTER FIXED PROVISIONS		
	X			646.4005	LOWER CUTTER REMOVABLE PROVISIONS		
		X		646.4004	FRED PROVISIONS KIT		
			X	646.4003	CABLE CUTTERS EX WIPER FRED PROVISIONS		
			X	646.4002	AS350 WIPER DEFLECTOR KIT		
			X	646.4001	AS350 CABLE CUTTERS KIT		
4006	4003	4004	4001	4002	FIND #	PART #	SPEC.

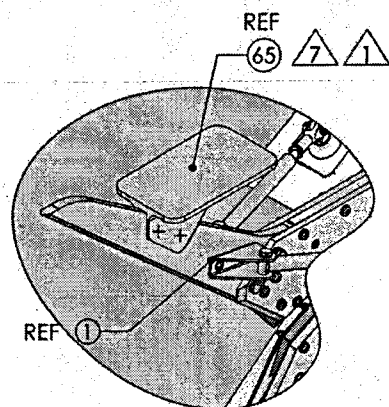
QTY		PARTS LIST	
NEXT ASSY (S)		DART 3030 ENTERPRISE CT., SUITE A VISTA, CA 92081 (760)-724-5300 FAX (760)-724-5300 WWW.DARTAEROSPACE.COM	
DESIGNED BY: P. BRAVO CHECKED BY: P. BRAVO DATE: 08/09/2018 DOWNGRADE: 08/09/2018		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 1. PLACE DECIMALS 0.00 2. PLACE DECIMALS 0.00 3. PLACE DECIMALS 0.00	
ASS350 CABLE CUTTERS KIT B 07M26 646.4000 C		SCALE: NONE SHEET 1 OF 5	

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES
DBA DART AEROSPACE. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE EXPRESS
WRITTEN PERMISSION OF APICAL INDUSTRIES DBA DART AEROSPACE IS PROHIBITED.



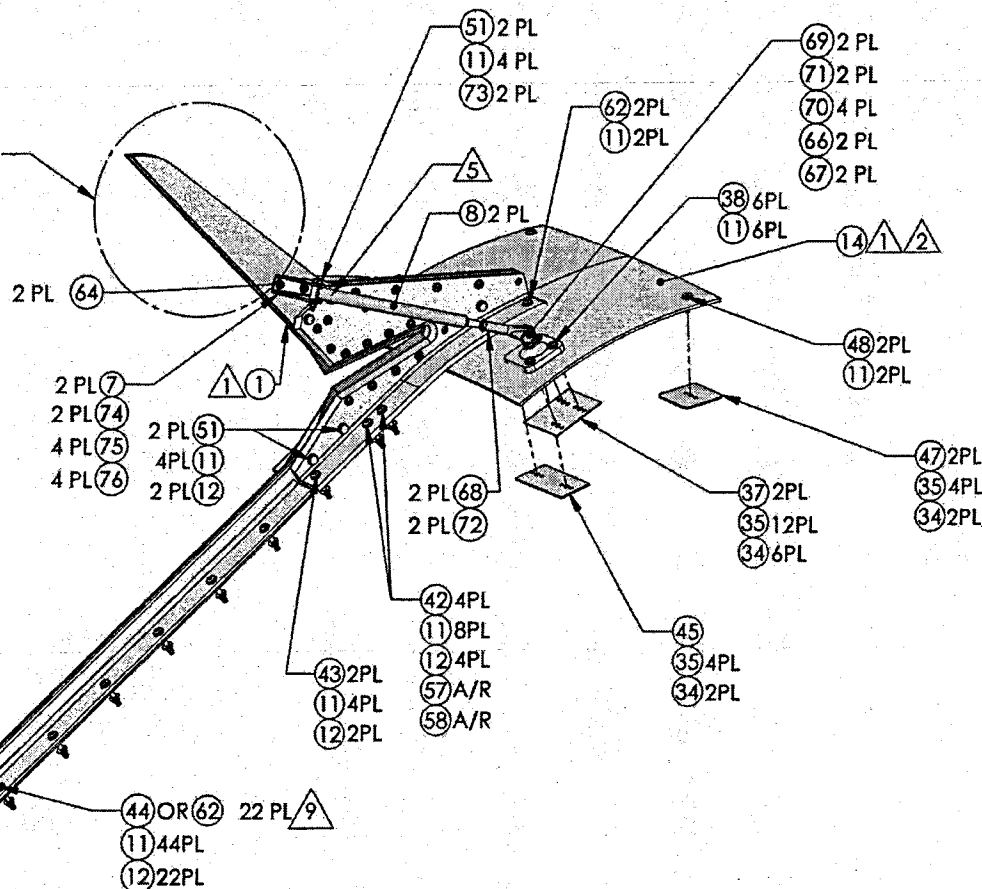
ORIGINAL DATE JANUARY 08-27-08		3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760) 724-5300	
DRAWN BY S. HUR		CHECKED BY P. BRAVO	
DRAWING APPROVAL P. BRAVO 08-27-08		APICAL INDUSTRIES, INC. DBA DART AEROSPACE	
CONTRACT NO.		AS350 CABLE CUTTERS KIT	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.010 3 PLACE DECIMALS ±.005 ANGLES ±.5°		SUE (CAGE CODE) B 07MZ6	QWS NO. 646.4000
SCALE NONE		REV. C	SHEET 2 OF 5

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES DSA DART AEROSPACE. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES DSA DART AEROSPACE IS PROHIBITED.



DETAIL D
TYPICAL GPS MOUNT KIT INSTALLATION

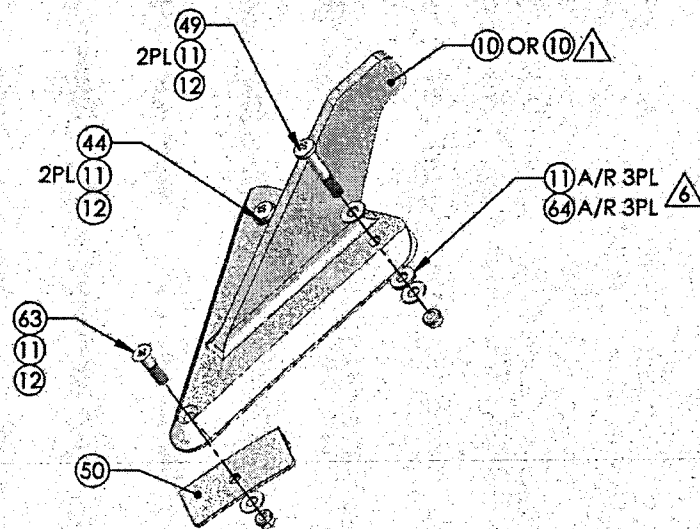
DETAIL D



DETAIL A
SHOWN ISOMETRICALLY

ORIGINAL DATE 08-22-08		DART 3030 ENTERPRISE CT., SUITE A	
DRAWN BY J. BRAY		VISTA, CA. 92081	
CHECKED BY J. BRAY		(760)-724-5300	
DESIGNED BY J. BRAY		APICAL INDUSTRIES INC.	
DATE 08-22-08		1999 DSA DART AEROSPACE	
CONTRACT NO.			
UNLESS OTHERWISE SPECIFIED			
DIMENSIONS ARE IN INCHES			
TOLERANCES ARE:			
2 PLACE DECIMALS ±.01			
3 PLACE DECIMALS ±.005			
ANGLES ±.5°			
SCALE NONE		SHEET 3 OF 5	

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES
DIA DART AEROSPACE. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE EXPRESS
WRITTEN PERMISSION OF APICAL INDUSTRIES DIA DART AEROSPACE IS PROHIBITED.



DETAIL C
LH SHOWN EXPLODED
RH OPPOSITE

ORIGINAL DATE 08/27/08	3030 ENTERPRISE CT. SUITE A VISTA, CA. 92081 (760)-724-5300	
DRAWN BY S. BRAY	CHECKED P. BRAY	DART AEROSPACE APICAL INDUSTRIES, INC. DIA DART AEROSPACE
DRAWING APPROVAL P. BRAY	DESIGNER	
CONTRACT NO.		AS350 CABLE CUTTERS KIT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACES DECIMALS ±.010 3 PLACES DECIMALS ±.005 ANGLES ±.5°		SIZE (CALC CDR) DWG. NO. 646.4000 REV. C SCALE NONE SHEET 5 OF 5

REFERENCE ONLY

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES DBA DART AEROSPACE. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE EXPLICIT WRITTEN PERMISSION OF APICAL INDUSTRIES DBA DART AEROSPACE IS PROHIBITED.

NOTES:

1 AFTER INSTALLATION, APPLY F/N 54 A/R TO FILL GAPS AND FILLET EDGES.

2 INSTALL F/N 14 WITH F/N 52 & 53.

3 3M VHB ADHESIVE TAPE .025" THICK X .50" WIDE
VENDOR: MCMASTER-CARR P/N 75935A651.

4 3M TAPE PRIMER 94, APPLY TO BOTH SURFACES A/R BEFORE TAPE.
VENDOR: R.S. HUGHES P/N 021200-24216.

5 REUSE FASTENERS FROM F/N 1.

6 USE WASHERS A/R AS SHIMS TO OBTAIN BEST FITMENT.

7 AT CUSTOMERS OPTION, INSTALL F/N 65 BY MATCH DRILLING ON TO F/N 1.

8 INSTALL SHIM IF OEM PROVISIONS ARE INSTALLED ON AIRCRAFT. REMOVE SHIM LAYERS TO ACHIEVE CORRECT SIZE. MATCH DRILL HOLES. USE F/N 78 SCREW IN PLACE OF F/N 17 SCREW.

9 NEWER INSTALLATIONS ON AIRCRAFT WITH UPDATED CANOPY MAY REQUIRE DIFFERENT LENGTH SCREWS. USE F/N 62 TO REPLACE F/N 44 & F/N 26 IN PLACE OF F/N 41 WHEN NECESSARY.

UNINCORPORATED ECN(S)

05304

5	5	5	78	601.3875	SCREW	
1	1	1	77	646.9410	SHIM	
	4	4	76	601.2764	WASHER	
	2	2	75	601.2973	LOCKNUT	
	2	2	74	601.2988	SCREW	
	2	2	73	601.2943	LOCKNUT	
	2	2	72	601.3126	NUT	
	2	2	71	601.3209	LOCKNUT	
	4	4	70	601.2638	WASHER	
	2	2	69	601.2669	BOLT	
	2	2	68	601.3119	GLEVIS	
	2	2	67	601.3121	EYE BOLT	
	2	2	66	650.9201	EYE BRACKET ASSY	
REF	REF	REF	65	647.5701	GPS MOUNT KIT	
		2	64	601.3151	WASHER	
			63	601.2911	SCREW	
	24	24	62	601.2637	SCREW	
2	2	2	61	601.2763	BOLT	
	1	1	60	646.3913	SHIM	
	4	4	59	646.3912	SHIM	
	1	1	58	646.3911	SHIM	
	4	4	57	646.3910	SHIM	
	5	5	56	600.1013	PRIMER	
	8 FT	8 FT	55	600.0129	VHB TAPE	
	1	1	54	600.1012	SEALANT	
	1	1	53	600.0991	MAGNABOND 6398 PART B	
	1	1	52	600.0990	MAGNABOND 6398 PART A	
6	10	10	51	601.2826	BOLT	
		2	50	646.3814	WIPER BRACKET	
		2	49	601.2910	SCREW	
	2		48	601.1365	SCREW	
	2		47	646.3719	DOUBLER	
	2		46	646.3718	CUSTOM WASHER	
	1		45	646.3717	DOUBLER	
	22	2	44	601.1948	SCREW	
	2		43	601.1952	SCREW	
	4		42	601.1956	SCREW	
4006	4003	4004	4003	4002	4001	FIND #
5	5	5	78	601.3875	SCREW	
1	1	1	77	646.9410	SHIM	
	4	4	76	601.2764	WASHER	
	2	2	75	601.2973	LOCKNUT	
	2	2	74	601.2988	SCREW	
	2	2	73	601.2943	LOCKNUT	
	2	2	72	601.3126	NUT	
	2	2	71	601.3209	LOCKNUT	
	4	4	70	601.2638	WASHER	
	2	2	69	601.2669	BOLT	
	2	2	68	601.3119	GLEVIS	
	2	2	67	601.3121	EYE BOLT	
	2	2	66	650.9201	EYE BRACKET ASSY	
REF	REF	REF	65	647.5701	GPS MOUNT KIT	
		2	64	601.3151	WASHER	
			63	601.2911	SCREW	
	24	24	62	601.2637	SCREW	
2	2	2	61	601.2763	BOLT	
	1	1	60	646.3913	SHIM	
	4	4	59	646.3912	SHIM	
	1	1	58	646.3911	SHIM	
	4	4	57	646.3910	SHIM	
	5	5	56	600.1013	PRIMER	
	8 FT	8 FT	55	600.0129	VHB TAPE	
	1	1	54	600.1012	SEALANT	
	1	1	53	600.0991	MAGNABOND 6398 PART B	
	1	1	52	600.0990	MAGNABOND 6398 PART A	
6	10	10	51	601.2826	BOLT	
		2	50	646.3814	WIPER BRACKET	
		2	49	601.2910	SCREW	
	2		48	601.1365	SCREW	
	2		47	646.3719	DOUBLER	
	2		46	646.3718	CUSTOM WASHER	
	1		45	646.3717	DOUBLER	
	22	2	44	601.1948	SCREW	
	2		43	601.1952	SCREW	
	4		42	601.1956	SCREW	
4006	4003	4004	4003	4002	4001	FIND #
5	5	5	78	601.3875	SCREW	
1	1	1	77	646.9410	SHIM	
	4	4	76	601.2764	WASHER	
	2	2	75	601.2973	LOCKNUT	
	2	2	74	601.2988	SCREW	
	2	2	73	601.2943	LOCKNUT	
	2	2	72	601.3126	NUT	
	2	2	71	601.3209	LOCKNUT	
	4	4	70	601.2638	WASHER	
	2	2	69	601.2669	BOLT	
	2	2	68	601.3119	GLEVIS	
	2	2	67	601.3121	EYE BOLT	
	2	2	66	650.9201	EYE BRACKET ASSY	
REF	REF	REF	65	647.5701	GPS MOUNT KIT	
		2	64	601.3151	WASHER	
			63	601.2911	SCREW	
	24	24	62	601.2637	SCREW	
2	2	2	61	601.2763	BOLT	
	1	1	60	646.3913	SHIM	
	4	4	59	646.3912	SHIM	
	1	1	58	646.3911	SHIM	
	4	4	57	646.3910	SHIM	
	5	5	56	600.1013	PRIMER	
	8 FT	8 FT	55	600.0129	VHB TAPE	
	1	1	54	600.1012	SEALANT	
	1	1	53	600.0991	MAGNABOND 6398 PART B	
	1	1	52	600.0990	MAGNABOND 6398 PART A	
6	10	10	51	601.2826	BOLT	
		2	50	646.3814	WIPER BRACKET	
		2	49	601.2910	SCREW	
	2		48	601.1365	SCREW	
	2		47	646.3719	DOUBLER	
	2		46	646.3718	CUSTOM WASHER	
	1		45	646.3717	DOUBLER	
	22	2	44	601.1948	SCREW	
	2		43	601.1952	SCREW	
	4		42	601.1956	SCREW	
4006	4003	4004	4003	4002	4001	FIND #

REV.	DESCRIPTION	DATE	APPROVED
A	INCORPORATED ECN 02199, 02381, 02719 & 02745	02/08/2010	P. BRAVO
B	INCORPORATED ECN 03044, 03079 & 04751	11/04/2014	P. BRAVO
C	INCORPORATED ECN 05098	08/09/2015	P. BRAVO

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

QTY	NEXT ASSY (S)	ORIGINAL DATE (DD-MM-YY)	08-22-08	DART 3030 ENTERPRISE CT., SUITE A VISTA, CA 92081 (760) 724-5300 APICAL INDUSTRIES, INC. DBA DART AEROSPACE
		DRAWN BY	P. BRAVO	
		DRAWING APPROVAL		
		DATE	08-22-08	
		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.010 3 PLACE DECIMALS ±.005 ANGLES ±.5°	SEE B	AS350 CABLE CUTTERS KIT 846.4000 SCALE NONE SHEET 1 OF 5